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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTOCommunications@hoffmanwarnick.com

Office Action Summary	Application No. 10/688,006	Applicant(s) WHITE, RUSSELL T.
	Examiner ADAM LEVINE	Art Unit 3625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 08 December 2008.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-22 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-22 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date _____

5) Notice of Informal Patent Application

6) Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 8, 2008, has been entered.

Response to Amendment

Applicant's amendments and remarks filed December 8, 2008, are responsive to the office action mailed August 7, 2008. Independent claims 1,8,14, and 19 have been amended. Claims 1-22 are currently pending and considered in this office action.

Response to Arguments

Pertaining to rejection under 35 USC 112, first paragraph, in the prior office action

Applicant's arguments filed December 8, 2008, have been fully considered but they are not persuasive. Applicant argues that the limitation "specified attribute" is supported by paragraph 0032, without any further explanation or supporting remarks. This limitation was added to the claims in applicant's amendments dated February 26, 2008, seeking to overcome a similar first paragraph rejection in the previous action with

regard to "specified characteristic." The advisory action mailed April 4, 2008, indicated that the rejection was overcome, however as noted in the office action mailed August 7, 2008, prosecution was reopened in order to provide applicant an opportunity to respond to this rejection because it was determined during the pre-appeal conference that the advisory action mailed April 4, 2008, was incorrect because the rejections under 35 USC 112, first and second paragraphs, were not overcome by applicant's reply. Applicant responds to this opportunity with the same remarks previously filed on February 26, 2008; the same remarks that were thus previously held insufficient.

In response to applicant's remarks, although the one and only appearance of "attributes" in the entire specification appears in paragraph 0032, there is no support in paragraph 0032 for the query returning records containing items based on a "specified attribute" of the items. The only discussion of attributes in paragraph 0032 (and therefore in the entire specification) is as follows: "Administration system 142 can add a data entry in storage system 124 (FIG. 4) that includes one or more attributes of item 56B and identifies highest level page 60 on which item 56B is to be displayed." There is no discussion of a "specified attribute" let alone of a query returning a set of records containing items based on a "specified attribute." Attributes are only mentioned in the context of potentially adding a data entry in a storage system that could include one or more attributes of an item. This does not describe the newly claimed feature.

Pertaining to rejection under 35 USC 112, second paragraph, in the prior office action

Applicant's arguments filed December 8, 2008, have been fully considered but they are not persuasive. Applicant disagrees with the rejection, submitting that this

"limitation remained in the claim in the latest amendment." Remarks page 7. It is therefore noted, as above, that although the advisory action mailed April 4, 2008, indicated that this rejection was overcome, it was also noted in the office action mailed August 7, 2008, that prosecution was reopened in order to provide applicant an opportunity to respond to this rejection because it was determined during the pre-appeal conference that the advisory action mailed April 4, 2008, was incorrect because the rejections under 35 USC 112, first and second paragraphs, were not in fact overcome by applicant's reply. Applicant responds to this opportunity by arguing that the "limitation remained in the claim in the latest amendment." Although applicant has made cosmetic changes to the claim, the problem remains. It is unclear what is driving the query, where the results come from, how the query returns a set of records, etc..

Pertaining to rejection under 35 USC §102(b) in the previous office action

Applicant's arguments filed December 8, 2008, have been fully considered but they are not persuasive. Applicant argues that the prior art does not "teach that each of the items in the hierarchical structure is located using a database search query for each level of the hierarchical structure and a page is dynamically generated based on the result of the query, wherein the query returns a set of records containing the items based on a specified attribute of the items."

Applicant attempts to clarify his position with regard to the claim language by further stating that the prior art does not "indicate that a database query that returns a set of records containing the items based on a specified attribute of the items is used to navigate the browse tree or that a page is dynamically generate based on the result

thereof." This is interpreted as referring to two separate elements: using a database search query based on a specified attribute of the items to return the set of records, and then dynamically generating a page showing the results. It should also be noted that the "specified attribute" that now appears in the claims is not described in the specification as originally filed, however, this is interpreted as the category selected by the query, which is disclosed. It is also disclosed in the prior art (see at least Spiegel column 5 line 10-column 6 line 5.

The prior art also indicates dynamic generation of a page (see at least column 2 lines 25-36, column 5 lines 3-10, column 7 lines 5-24). These passages also indicate that the dynamic generation of a page occurs based on the result of a query. For more, please see the following rejection under 35 USC §102(b). Please note that the portion cited by applicant, column 7 lines 17-19, is not distinguishing because it is not a mutually exclusive element that would preclude the presence of the relevant feature, and in addition is not representative of the subject matter in the remainder of the cited portion. It merely refers to a minor aspect of the results presented on the dynamically generated page. The page is dynamically generated based on the results of a query, and among those results appear featured items and categories. The featured items and categories are themselves represented by hyperlinks that provide a direct path to the detail page with further information on those specific items.

Applicant argues that because the prior art uses hyperlinks as a shortcut to provide a direct path to previously gathered query results that no attribute based database search query for each search level has ever been used to locate results. This

is just simply not within a plain reading of the reference. It essentially argues that because the prior art uses hyperlinks to raise query results to a higher hierarchical level, therefore the original query for each level has never occurred. As noted in applicant's remarks, "...hyperlinks that provide a direct path to a previously prepared location." Thus, even applicant admits that the location has been previously prepared and is referred to by a hyperlink. The only real question is how the hyperlinks do their job and how the results are displayed, i.e., how the page is dynamically generated.

Regarding the automatic generation of queries, in recalling an item the query is automatically generated for each level of the hierarchical structure. This is performed by both the present invention and the prior art as the query levels of the item are recalled from storage and/or replicated recursively in order to present the new query in process while bringing the highlighted popular item to the front of a category or subcategory in which the item appropriately belongs. Spiegel refers to its hierarchical structure as a browse tree, and to query levels as nodes (which can refer to either categories or items). Spiegel describes automatically identifying nodes and calling them to attention by elevating them along child-parent paths. These paths are the hierarchical query levels described in the present application (see at least column 1 lines 60-66, column 2 lines 25-30, 41-43). This means that the each level of the query is automatically generated and repeated.

Applicant is reminded that the examiner cites columns and line numbers in the references as applied to the claims for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the

specific limitations within the claims, other passages and figures may apply as well. It is respectfully requested that, in preparing responses, the applicant fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. **Claims 1-22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.** The claim(s) contains subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The "specified attribute" claimed in the amendments to claims 1, 8, 14, and 19, is not described in the specification and was not claimed or otherwise disclosed in the original specification.

The only discussion of attributes in the specification is as follows: "Administration system 142 can add a data entry in storage system 124 (FIG. 4) that includes one or more attributes of item 56B and identifies highest level page 60 on which item 56B is to be displayed." There is no discussion of a "specified attribute" let alone of a query returning a set of records containing items based on a "specified attribute." Attributes are only mentioned in the context of potentially adding a data entry in a storage system

that could include one or more attributes of an item. This does not describe the newly claimed feature.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. **Claims 1, 8, 14, and 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

Claims 1, 8, 14, and 19 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. It is unclear how a page is dynamically generated based on the result of the query because it is unclear what is driving the query, where the results come from, how the query returns a set of records, etc.. The operative element that dynamically generates a page based on the result of the query is unknown. What is dynamically generating a page and on what query result is the page based. What exactly are the defined results of the query?

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

1. **Claims 1-18 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.** Claims 1-13 are directed to a process that does nothing more than manipulate an abstract idea. Mere recitation in the preamble (i.e., intended use) or mere implication of employing a machine or article of manufacture to perform some or all of the recited steps does not confer statutory subject matter to an otherwise abstract idea. System components as claimed (and means) are software components lacking structural specificity.

The first step in determining whether a claim recites patent eligible subject matter is to determine whether the claim falls within one of the four statutory categories of invention recited in 35 USC 101: process, machine, manufacture and composition of matter. The latter three categories define "things" or "products," while a "process" consists of a series of steps or acts to be performed. For purposes of section 101, a "process" has been given a specialized, limited meaning by the courts. Based on Supreme Court precedent and recent Federal Circuit decisions, a process must (1) be tied to a particular machine or apparatus, or (2) transform a particular article to a different state or thing. If neither of these requirements is met by the claim, the method is not a patent eligible process. See *In re Bilski*, 2008 U.S. App. LEXIS 22479. An example of a method claim that would not qualify as a statutory process would be a claim that recited purely mental steps.

A claim that involves a process that transforms a particular article may be patentable under § 101. See *Diehr*, 450 U.S. at 184 (holding a process that involved calculations using the "Arrhenius equation" patentable because the claim "involve[d] the

transformation of an article, in this case raw, uncured synthetic rubber, into a different state or thing"). Processes involving mathematical algorithms used in computer technology may be patentable if they are tied to a specific machine or apparatus. Mental processes—or processes of human thinking—standing alone are not patentable even if they have practical application. The Supreme Court has stated that "[p]henomena of nature, though just discovered, mental processes, and abstract intellectual concepts are not patentable, as they are the basic tools of scientific and technological work." Benson, 409 U.S. at 67 (emphasis added). In *Flook* the patentee argued that his claims did not seek to patent an abstract idea (an algorithm) because they were limited to a practical application of that idea—updating "alarm limits" for catalytic chemical conversion of hydrocarbons. 437 U.S. at 586, 589-90. The Court rejected the notion that mere recitation of a practical application of an abstract idea makes it patentable, concluding that "[a] competent draftsman could attach some form of post-solution activity to almost any mathematical formula." *Id.* at 590. Since all other features of the process were well-known, including "the use of computers for 'automatic monitoring-alarming,'" the Court construed the application as "simply provid[ing] a new and presumably better method for calculating alarm limit values." *Id.* at 594-95. The Court held the application unpatentable because "if a claim [as a whole] is directed essentially to a method of calculating, using a mathematical formula, even if the solution is for a specific purpose, the claimed method is nonstatutory." 437 U.S. at 595 (quoting *In re Richman*, 563 F.2d 1026, 1030 (CCPA 1977)).

In order to qualify as a statutory process, therefore, claims should positively recite the machine or apparatus to which they are tied, for example by identifying the machine or apparatus that accomplishes the method steps, or they should positively recite the particular article that is being transformed, for example by identifying the material that is being changed to a different state. The mere manipulation of data is not transformation of a particular article. There are two corollaries to the machine-or-transformation test. First, a mere field-of-use limitation is generally insufficient to render an otherwise ineligible method claim patent eligible. This means the machine or transformation must impose meaningful limits on the method claim's scope to pass the test. Second, insignificant extra-solution activity will not transform an unpatentable principle into a patentable process. This means reciting a specific machine or a particular transformation of a specific article in an insignificant step, such as data gathering or outputting, is not sufficient to pass the test.

Claims 1-13 do not identify any machine or apparatus or recite a tie to any machine or apparatus and they do not transform a particular article. They simply manipulate data.

Claims 14-18 provide for the use of various systems or system elements, but since the claims do not set forth any machine, apparatus, or steps involved in a method/process, it is unclear what apparatus, process, or other statutory class applicant is intending to encompass. A claim is indefinite where it merely recites the use of intangible or abstract elements.

Mere recitation in the preamble (i.e., intended use) or mere implication of employing a machine or article of manufacture does not confer statutory subject matter to an otherwise abstract idea. System components as claimed (and means) are lacking structural specificity and are potentially purely software components. If so, the claims are directed at a computer program not claimed as embodied in a computer-readable medium and as being implemented in a computer apparatus.

Computer programs claimed per se, i.e., the descriptions or expressions of the programs, are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer that permit the computer program's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. Accordingly, it is important to distinguish claims that define descriptive material per se from claims that define statutory inventions. MPEP 2106 IV B 1 (a).

Although an examination of the specification does indicate that "a storage system" is intended to refer to a machine or apparatus, it is the only element for which this is the case. This is insufficient to carry the entire set of claims because even if so interpreted it merely refers to a storage medium storing data and would therefore be nonstatutory because it is neither a properly claimed method meeting the statutory

requirements discussed above nor a properly claimed computer readable medium apparatus containing computer executable programming code.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Spiegel (Paper #051102; US Patent No. 6,466,918).

Spiegel teaches all the limitations of Claims 1-22. For example, with regard to method claims 1-13, Spiegel discloses a method for storing items in a hierarchical structure, allowing users to select items within that structure, identifying frequently purchased items, and elevating them for display on a higher level in the structure than that on which they would normally appear (see at least Abstract, Figs. 1A-4, column 1 lines 5-15). Spiegel further discloses:

- storing items in a hierarchical structure: wherein each of the items is located using a database search query for each level of the hierarchical structure, wherein the query returns a set of records containing the items based on a specified attribute of the items (see at least Abstract, Figs. 1A-8, column 1 lines 25-59, column 5 line 10-column 6 line 5); a page is dynamically generated based

on the result of the query (see at least fig.1A, column 2 lines 25-36, column 5 lines 3-10, column 7 lines 5-24, 59- column 8 line 8).

- identifying at least one high frequency item: wherein the at least one high frequency item is an item that is frequently purchased (see at least Abstract, Fig. 3, column 1 lines 7-13, column 1 line 60 – column 2 line 36, column 6 lines 5-20); maintaining a record of the frequency that each of the items has been purchased (see at least Abstract, column 2 lines 12-24, column 3 lines 13-29, column 6 lines 5-20, 30-39. Please note: this element is interpreted as referring to the storage of information regarding the frequency of purchase of each item.); a separate record of the frequency of purchase of each of the items is maintained for each of a plurality of groups of users (see at least column 7 line 59-column 8 line 7, column 9 line 64 – column 10 line 16.).
- automatically generating the query for each level of the hierarchical structure: to display the at least one high frequency item on a high level page (see at least Abstract, Figs. 1A,2-4,11; column 1 line 60 – column 2 line 4, column 2 lines 26-36, column 6 lines 5-20).
- presenting the item to an administrator: selecting at least one high frequency item for display on the high level page (see at least Abstract, Figs. 1A,2-4,11; column 1 line 60 – column 2 line 4, column 2 lines 26-36, column 6 lines 5-20).
- storing the operations performed by a user to select an item in the hierarchical structure: analyzing the stored operations, obtaining the query for each level based on the stored operations (see at least Abstract, Figs. 1-4,5,7,9,11; column

1 line 60 – column 2 line 4, column 2 lines 26-36, column 6 lines 5-20, column 9 line 64-column 10 line 26.).

- an identification system for identifying a user: (see at least column 2 line 46 – column 3 line 12, column 6 line 40 – column 7 line 5, column 11 lines 34-50, column 12 line 61 – column 13 line 7).

Pertaining to system claims 14-18

Rejection of system claims 14-18 is based on the same rationale as noted above.

Pertaining to computer program product claims 19-22

Rejection of computer program product claims 19-22 is based on the same rationale as noted above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ADAM LEVINE whose telephone number is (571)272-8122. The examiner can normally be reached on M-F, 8:30-5:00 Eastern.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A. Smith can be reached on 571.272.6763. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jeffrey A. Smith/
Supervisory Patent Examiner, Art
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Adam Levine
Patent Examiner
March 10, 2009